

**WASHINGTON STATE  
BUILDING CODE**

**CHAPTER 51-54  
First Edition**

**INTERNATIONAL FIRE CODE**



**Washington State Building Code Council**

**Effective July 1, 2004**

Copies of the State Building Codes and  
complete copies of the International Fire Code  
as published by the International Code Council  
may be obtained from:

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## ***Preface***

**Authority:** The International Fire Code (Chapter 51-54 WAC) is adopted by the Washington State Building Code Council pursuant to Chapters 19.27 and 70.92 RCW. These codes were first adopted by reference by the Washington State Legislature in 1974. In 1985, the Legislature delegated the responsibility of adoption and amendment of these codes to the State Building Code Council.

**Supersession of Previous Codes:** Chapter 51-54 WAC supersedes Chapters 51-44 and 51-45 WAC.

**Code Precedence:** The State Building Code Act, Chapter 19.27 RCW, establishes the following order of precedence among the documents adopted as parts of the State Building Code:

- International Building Code, Standards and amendments -WAC 51-50;
- International Residential Code, Standards and amendments – WAC 51-51
- International Mechanical Code, Standards and amendments - WAC 51-52;
- Uniform Fire Code, Standards and amendments - WAC 51-54;
- International Plumbing Code, Standards and amendments - WAC 51-56, 51-57.

Where there is a conflict between codes, an earlier named code takes precedence over a later named code. In the case of conflict between the duct insulation requirements of the International Mechanical Code and the duct insulation requirements of the Energy Code, the Energy Code, or where applicable, a local jurisdiction's energy code, shall govern.

Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

**Organization and Numbering:** These rules are written to allow compatible use with the International Fire Code. All sections which are amended, deleted, or added are referenced.

**Enforcement:** The State Building Code Act requires that each local jurisdiction enforce the State Building Code within its jurisdiction. Any jurisdiction can contract with another jurisdiction or an inspection agency to provide the mandated enforcement activities.

### **Amendments to the State Building Code:**

The State Building Code Council has adopted review procedures and approval criteria for local amendments. These procedures and criteria are found in Chapter 51-04 WAC. The Council has exempted from its review any amendments to the administrative provisions of the various codes.

Forms for proposing statewide amendments to the State Building Code are available from the State Building Code Council staff.

- A. **Amendments of Statewide Application:** On a yearly basis the State Building Code Council will consider proposals to amend the State Building Code. Unless directed by the State Legislature, federal mandates or court order, the Council will not enter formal rulemaking until 2006 as part of its consideration of adoption of the 2006 series of codes.

Proposals to amend the State Building Code shall be made on forms provided by the Building Code Council.

Code Change Proposal Submittal Deadline: March 1st of each year.

- B. **Local Amendments:** Any jurisdiction may amend the State Building Code provided the amendments do not reduce the minimum performance standards of the codes. There are two areas where local amendments are limited or prohibited:

**Prohibited Amendments:** Residential provisions of the State Energy Code (WAC 51-11), the Ventilation and Indoor Air Quality Code (WAC 51-13); any provision of the International Building Code or International Residential Code affecting accessibility; and standards specifically adopted in Chapters 19.27 and 19.27A cannot be amended by any local jurisdiction.

**Residential Amendments:** Amendments by local jurisdictions which affect the construction of single family and multi-family residential buildings must be reviewed and approved by the State Building Code Council before such amendments can be enforced. The State Building Code Act provides the following definition:

Multi-family residential building: means common wall residential buildings that consist of four or fewer units, that do not exceed two stories in height, that are less than 5,000 square feet in area, and that have a one-hour fire-resistive occupancy separation between units.

Application forms for Council review of local amendments are available from the State Building Code Council Staff.

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**Printing Format:** This version of the rules is published as a series of insert or replacement pages. Each page provides instructions for installing them in the model code book. Amendments to the model code which are new or revised from the previous edition of this code are indicated by a line in the margin next to the revised portions.

**Effective Date:** These rules were adopted by the State Building Code Council on November 21, 2003. The rules are effective throughout the state on July 1, 2004. (This version of the code is based on WAC 51-51 as published in WSR 04-01-109. It is subject to review by the State Legislature during the 2004 session.)

**Building Permit Fees:** The activities of the State Building Code Council are supported by permit fees collected by each city and county. Section 19.27.085 of the State Building Code Act requires that a fee of \$4.50 be imposed on each building permit issued by each city and county. In addition, a fee of \$2.00 per unit shall be imposed for each dwelling unit after the first unit, on each building containing more than one residential unit. For the purpose of this fee, WAC 365-110-035 defines building permits as any permit to construct, enlarge, alter, repair, move, improve, remove, convert or demolish any building or structure regulated by the Building Code. Exempt from the fee are plumbing, electrical, mechanical permits, permits issued to install a mobile/manufactured home, commercial coach or factory built structure, or permits issued pursuant to the International Fire Code.

Each city and county shall remit moneys collected to the state treasury quarterly. No remittance is required until a minimum of \$50.00 has accumulated.

These permit fees are the amounts current in January 2004. Such fees may be changed by the State Legislature.

**Opinions:** Only at the request of local enforcement official, the State Building Code Council may issue interpretations/opinions of those provisions of the State Building Code created by the Council, or provisions of the model codes amended by the Council. Final interpretation authority for any specific permit resides with the local enforcement official.

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**CHAPTER 51-54 WAC  
STATE BUILDING CODE ADOPTION AND AMENDMENT  
OF THE 2003 EDITION OF THE INTERNATIONAL FIRE CODE**

**WAC 51-54-001 AUTHORITY**

These rules are adopted under the authority of Chapter 19.27 RCW.

**WAC 51-54-002 PURPOSE**

The purpose of these rules is to implement the provisions of Chapter 19.27 RCW, which provides that the State Building Code Council shall maintain the State Building Code in a status which is consistent with the purpose as set forth in RCW 19.27.020. In maintaining the codes the Council shall regularly review updated versions of the codes adopted under the act, and other pertinent information, and shall amend the codes as deemed appropriate by the Council.

**WAC 51-54-003 INTERNATIONAL FIRE CODE**

The 2003 edition of the International Fire Code, published by the International Code Council is hereby adopted by reference with the following additions, deletions and exceptions.

**WAC 51-54-007 EXCEPTIONS**

The exceptions and amendments to the International Fire Code contained in the provisions of Chapter 19.27 RCW shall apply in case of conflict with any of the provisions of these rules.

Codes referenced which are not adopted through RCW 19.27.031 or RCW 19.27A shall not apply unless specifically adopted by the authority having jurisdiction.

The provisions of this code do not apply to temporary growing structures used solely for the commercial production of horticultural plants including ornamental plants, flowers, vegetables, and fruits. "Temporary growing structure" means a structure that has the sides and roof covered with polyethylene, polyvinyl, or similar flexible synthetic material and is used to provide plants with either frost protection or increased heat retention. A temporary growing structure is not considered a building for purposes of this code.

The provisions of this code do not apply to the construction, alteration, or repair of temporary worker housing except as provided by rule adopted under chapter 70.114A RCW or chapter 37, Laws of 1998 (SB 6168). "Temporary worker housing" means a place, area, or piece of land where sleeping places or housing sites are provided by an employer for his or her employees or by another person, including a temporary worker housing operator, who is providing such accommodations for employees, for temporary, seasonal occupancy, and includes "labor camps" under RCW 70.54.110.

The manufacture, storage, handling, sale and use of fireworks shall be governed by Chapter 70.77 RCW and by Chapter 212-17 WAC and local ordinances consistent with Chapter 212-17 WAC.

**WAC 51-54-008 IMPLEMENTATION**

The International Fire Code adopted by Chapter 51-54 WAC shall become effective in all counties and cities of this state on July 1, 2004.







11. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of marine craft and special equipment at commercial, industrial, governmental or manufacturing establishments.



**ADULT FAMILY HOME** means a dwelling in which a person or persons provide personal care, special care, room and board to more than one but not more than six adults who are not related by blood or marriage to the person or persons providing the services.

**CHILD DAY CARE**, shall, for the purposes of these regulations, mean the care of children during any period of a 24-hour day.

**ELECTRICAL CODE** is the National Electrical Code, promulgated by the National Fire Protection Association, as adopted in Chapter 296-46 WAC, or the locally adopted Electrical Code.

**FAMILY CHILD DAY CARE HOME** is a child day care facility, licensed by the state, located in the dwelling of the person or persons under whose direct care and supervision the child is placed, for the care of twelve or fewer children, including children who reside at the home.

**Day Care.** The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2-1/2 years of age, shall be classified as a Group E occupancy.

**Exception:** Family child day care homes licensed by the Washington State Department of Social and Health Services for the care of twelve or fewer children shall be classified as Group R-3.

**Group I-1.** This occupancy shall include buildings, structures or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Convalescent facilities
- Group homes
- Halfway houses
- Residential board and care facilities
- Social rehabilitation facilities

A facility such as the above with five or fewer persons and adult family homes licensed by the Washington State Department of Social and Health Services shall be classified as a Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2. A facility such as above, housing at least six and not more than 16 persons, shall be classified as Group R-4.

A facility such as the above providing licensed care to clients in one of the categories listed in Section 313.1 regulated by either the Washington Department of Health or the Department of Social and Health Services shall be classified as Licensed Care Group LC.

**Group I-2.** This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care on a 24-hour basis of more than five persons who are not capable of self-preservation. This group shall include, but not be limited to, the following:

- Hospitals
- Nursing homes (both intermediate-care facilities and skilled nursing facilities)
- Mental hospitals
- Detoxification facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

A facility such as the above providing licensed care to clients in one of the categories listed in Section 313.1 regulated by either the Washington Department of Health or the Department of Social and Health Services shall be classified as Licensed Care Group LC.

A child care facility which provides care on a 24-hour basis to more than five children 2-1/2 years of age or less shall be classified as Group I-2.

(Group I-3 remains as printed)



**Child care facility.** A facility that provides supervision and personal care on less than a 24-hour basis for more than five children 2-1/2 years of age or less shall be classified as Group I-4.

**Exceptions:**

1. A child day care facility that provides care for more than five but no more than 100 children 2-1/2 years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.
2. Family child day care homes licensed by the Washington State Department of Social and Health Services for the care of twelve or fewer children shall be classified as Group R-3.

**RESIDENTIAL GROUP R.** Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or Licensed Care Group LC. Residential occupancies shall include the following:

**R-1** *(Remains as printed)*

**R-2** *(Remains as printed)*

**R-3** Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I and where buildings do not contain more than two dwelling units as applicable in Section 101.2, including adult family homes and family child day care homes for the care of twelve or fewer children, licensed by the Washington State Department of Social and Health Services, or adult and child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours. Adult family homes and family child day care homes, or adult and child care facilities that are within a single-family home are permitted to comply with the International Residential Code in accordance with Section 101.2.

Foster Family Care Homes licensed by the Washington State Department of Social and Health Services shall be permitted, as an accessory use to a dwelling, for six or fewer children including those of the resident family.

**R-4** *(see following page)*

**R-4** Residential occupancies shall include buildings arranged for occupancy as residential care / assisted living facilities including more than five but not more than 16 occupants, excluding staff.

**Exception:** Adult family homes, family child day care homes and foster family care homes shall be classified as Group R-3.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided for in this code or shall comply with the International Residential Code in accordance with Section 101.2.

**Licensed Care Group LC.** Licensed Care Group LC includes the use of a building, structure, or portion thereof, for the business of providing licensed care to clients in one of the following categories regulated by either the Washington Department of Health or the Department of Social and Health Services:

1. Adult residential rehabilitation facility.
2. Alcoholism intensive inpatient treatment service.
3. Alcoholism detoxification service.
4. Alcoholism long term treatment service.
5. Alcoholism recovery house service.
6. Boarding home.
7. Group care facility.
8. Group care facility for severely and multiple handicapped children.
9. Residential treatment facility for psychiatrically impaired children and youth.

**Exception:** Where the care provided at an alcoholism detoxification service is acute care similar to that provided in a hospital, the facility shall be classified as a Group I-2 Occupancy.

**307.2.1 Authorization.** Where required by state or local law or regulations, open burning shall only be permitted with prior approval from the state or local air and water quality management authority, provided that all conditions specified in the authorization are followed. See also WAC 173-425.

**308.3.1.1 Liquefied-petroleum-gas-fueled cooking devices.** This section is not adopted.

**307.3.2 Recreational Fires.** Recreational fires shall not be conducted within 25 feet of a structure or combustible material. Conditions which could cause a fire to spread within 25 feet of a structure shall be eliminated prior to ignition. See also WAC 173-425.

**308.3.1 Open-flame cooking devices.** This section is not adopted.

(Insert Facing Page 27)

**308.3.4 Aisles and exits.** Candles shall be prohibited in areas where occupants stand, or in an aisle or exit.

**Exception:** Candles used in religious ceremonies. See RCW 19.27.031(3).

**308.3.5 Religious ceremonies.** Participants in religious ceremonies shall not be precluded from carrying hand-held candles.

**308.3.7 Group A occupancies.** Open-flame devices shall not be used in a Group A occupancy.

**Exceptions:**

1. Open-flame devices are allowed to be used in the following situations:
  - 1.1 Where necessary for ceremonial or religious purposes in accordance with Section 308.5.
  - 1.2 On stages and platforms as a necessary part of a performance in accordance with Section 308.6, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants.
  - 1.3 Where candles on tables are securely supported on substantial noncombustible bases and the candle flames are protected provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants.
2. Heat-producing equipment complying with Chapter 6 and the International Mechanical Code.
3. Gas lights are allowed to be used provided adequate precautions satisfactory to the fire code official are taken to prevent ignition of combustible materials.





**503.1 Where required.** Fire apparatus access roads shall be provided and maintained in accordance with locally adopted street, road, and access standards.

**503.1.1 Buildings and facilities,** is not adopted.

**503.1.2 Additional access,** is not adopted.

**503.1.3 High piled storage,** is not adopted.

**503.2 Specifications.** This section is not adopted.



**503.3 Marking.** This section is not adopted.

**503.4 Obstruction of fire apparatus access roads.** This section is not adopted.





**Table 804.1.2—Support Stand Water Capacity**

Tree Stem Diameter (inches)	Minimum Support Stand Water Capacity (gallons)	Typical Daily Water Transpiration Amount (gallons)
Up to 4	1	¼ to 1
4 to 6	1½	1¼ to 1½
7 to 8	2	1¾ to 2
9 to 12	3	2¼ to 3
13 and over	4	Over 3

**804.1.1 Restricted occupancies.** Natural cut trees shall be prohibited in Group 1-1, 1-2, 1-3, 1-4, LC and R-4 occupancies.

**804.1.2 Support devices.** The support device that holds the tree in an upright position shall be of a type that is stable and that meets all of the following criteria:

1. The device shall hold the tree securely and be of adequate size to avoid tipping over of the tree.
2. The device shall be capable of containing a minimum supply of water in accordance with Table 804.1.2.
3. The water level, when full, shall cover the tree stem at least 2 inches (51 mm). The water level shall be maintained above the fresh cut and checked at least once daily.

**804.1.3 Dryness.** The tree shall be removed from the building whenever the tree is determined to be dry by needle pliability, discoloration or other approved means as approved by the fire code official. The tree shall be checked daily for dryness.



**PORTABLE SCHOOL CLASSROOM.** A structure, transportable in one or more sections, which requires a chassis to be transported, and is designed to be used as an educational space with or without a permanent foundation. The structure shall be trailerable and capable of being demounted and relocated to other locations as needs arise.



**903.2.1.2 Group A-2.** An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m<sup>2</sup>).
2. The fire area has an occupant load of 100 or more.
3. The fire area is located on a floor other than the level of exit discharge.

**903.2.2 Group E.** An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m<sup>2</sup>) in area.
2. Throughout every portion of educational buildings below the level of exit discharge.

**Exception:** An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

3. Throughout all newly constructed Group E Occupancies having an occupant load of 50 or more for more than 12 hours per week or four hours in any one day. A minimum water supply meeting the requirements of NFPA 13 shall be required. The fire code official may reduce fire flow requirements for buildings protected by an approved automatic sprinkler system.

For the purpose of this section, additions exceeding 60 percent of the value of such building or structure, or alterations and repairs to any portion of a building or structure within a twelve-month period that exceeds 100 percent of the value of such building or structure shall be considered new construction. In the case of additions, fire walls shall define separate buildings.

**Exceptions:**

1. Portable school classrooms, provided aggregate area of clusters of portable school classrooms does not exceed 5,000 square feet (465 m<sup>2</sup>); and clusters of portable school classrooms shall be separated as required in Chapter 5 of the Building Code.
2. Group E Day Care.

When not required by other provisions of this chapter, a fire-extinguishing system installed in accordance with NFPA 13 may be used for increases and substitutions allowed in Section 504.2, 506.3, and Table 601 of the Building Code.





**903.2.10.3 Buildings over 75 feet in height.** An automatic sprinkler system shall be installed throughout buildings with a floor level having an occupant load of 30 or more that is located 75 feet (22 860 mm) or more above the lowest level of fire department vehicle access.

**Exceptions:**

1. Airport control towers.
2. Open parking structures.
3. Occupancies in Group F-2.

**909.6.3 Elevator Shaft Pressurization.** Where elevator shaft pressurization is required to comply with Exception 5 of IBC Section 707.14.1, the pressurization system shall comply with the following.

**909.6.3.1 Standards and testing.** Elevator shafts shall be pressurized to not less than 0.10 inch water column relative to atmospheric pressure. Elevator pressurization shall be measured with the elevator cars at the designated primary recall level with the doors in the open position. The test shall be conducted at the location of the calculated maximum positive stack effect in the elevator shaft. The measured pressure shall be sufficient to provide 0.10 inch of water column as well as accounting for the stack and wind effect expected on the mean low temperature January day.

**909.6.3.2 Activation.** The elevator shaft pressurization system shall be activated by a fire alarm system which shall include smoke detectors or other approved detectors located near the elevator shaft on each floor as approved by the building official and fire chief. If the building has a fire alarm panel, detectors shall be connected to, with power supplied by, the fire alarm panel.

**909.6.3.3 Separation.** Elevator shaft pressurization equipment and its ductwork located within the building shall be separated from other portions of the building by construction equal to that required for the elevator shaft.

**909.6.3.4 Location of intakes.** Elevator shaft pressurization air intakes shall be located in accordance with Section 909.10.3. Such intakes shall be provided with smoke detectors which upon detection of smoke, shall deactivate the pressurization fan supplied by that air intake.

**909.6.3.5 Power system.** The power source for the fire alarm system and the elevator shaft pressurization system shall be in accordance with Section 909.11.

**909.6.3.6 Hoistway venting.** Hoistway venting required by IBC Section 3004 need not be provided for pressurized elevator shafts.

**909.6.3.7 Machine rooms.** Elevator machine rooms required to be pressurized by IBC Section 3006.3 need not be pressurized where separated from the hoistway shaft by construction in accordance with IBC Section 707.

**909.6.3.8 Special inspections.** Special inspection shall be required in accordance with Section 909.18.8.3 and IBC Section 1704.





**1008.1.2 Door Swing.** Egress doors shall be side-hinged swinging.

**Exceptions:**

1. Private garages, office areas, factory and storage areas with an occupant load of 10 or less.
2. Group I-3 Occupancies used as a place of detention.
3. Doors within or serving a single dwelling unit in Groups R-2 and R-3 as applicable in Section 101.2.
4. In other than Group H Occupancies, revolving doors complying with Section 1008.1.3.1.
5. In other than Group H Occupancies, horizontal sliding doors complying with Section 1008.1.3.3 are permitted in a means of egress.
6. Power-operated doors in accordance with Section 1008.1.3.1.

Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons or a Group H Occupancy.

The opening force of interior side-swinging doors without closers shall not exceed a 5-pound force. For other side-swinging, sliding, and folding doors, the door latch shall release when subjected to a 15-pound force. The door shall be set in motion when subjected to a 30-pound force. The door shall swing to a full-open position when subjected to a 15-pound force. Forces shall be applied to the latch side. Within an accessible route, at exterior doors where environmental conditions require a closing pressure greater than 8.5 pounds, power-operated doors shall be used within the accessible route of travel.

**1009.13** Stairs or ladders within an individual dwelling unit used to gain access to areas of 200 square feet (18.6 m<sup>2</sup>) or less, and not containing the primary bathroom or kitchen, are exempt from the requirements of Section 1009.

(Insert Facing Page 110)

**1010.8 Handrails.** Ramps with a rise greater than 6 inches (152 mm) shall have handrails on both sides complying with Section 1009.11. At least one handrail shall extend in the direction of ramp run not less than 12 inches (305 mm) horizontally beyond the top and bottom of the ramp runs.



**1024.11 Assembly aisle walking surfaces.** Aisles with a slope not exceeding one unit vertical in eight units horizontal (12.5-percent slope) shall consist of a ramp having a slip-resistant walking surface. Aisles with a slope exceeding one unit vertical in eight units horizontal (12.5-percent slope) shall consist of a series of risers and treads that extends across the full width of aisles and complies with Sections 1024.11.1 through 1024.11.3.

**Exception:** When provided with fixed seating, aisles in Group A-1 occupancies shall be permitted to have a slope not steeper than one unit vertical in five units horizontal (20-percent slope).

**1024.13 Handrails.** Ramped aisles having a slope exceeding one unit vertical in 15 units horizontal (6.7-percent slope) and aisle stairs shall be provided with handrails located either at the side or within the aisle width.

**Exceptions:**

1. Handrails are not required for ramped aisles having a gradient no greater than one unit vertical in five units horizontal (20-percent slope) and seating on both sides.
2. Handrails are not required if, at the side of the aisle, there is a guard that complies with the graspability requirements of handrails.

**3006.4 Medical gas systems.** This section is not adopted.

**3006.1 General.** Compressed gases at hospitals and similar facilities intended for inhalation or sedation including, but not limited to, analgesia systems for dentistry, podiatry, veterinary and similar uses shall comply with this section in addition to other requirements of this chapter.

**Exception:** All distribution piping, supply manifolds, connections, regulators, valves, alarms, sensors and associated equipment shall be in accordance with the Plumbing Code.

**(Insert Facing Page 256)**





**3301.1 Scope.** The provisions of this chapter shall govern the possession, manufacture, storage, handling, sale and use of explosives, explosive materials, and small arms ammunition. The manufacture, storage, handling, sale and use of fireworks shall be governed by Chapter 70.77 RCW and by Chapter 212-17 WAC and local ordinances consistent with Chapter 212-17 WAC.

**Exceptions:**

1. The Armed Forces of the United States, Coast Guard or National Guard.
2. Explosives in forms prescribed by the official United States Pharmacopoeia.
3. The possession, storage and use of small arms ammunition when packaged in accordance with DOT packaging requirements.
4. The possession, storage and use of not more than 1 pound (0.454 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder and 10,000 small arms primers for hand loading of small arms ammunition for personal consumption.
5. The use of explosive materials by federal, state and local regulatory, law enforcement and fire agencies acting in their official capacities.
6. Special industrial explosive devices in which the aggregate contain less than 50 pounds (23 kg) of explosive materials.
7. The possession, storage and use of blank industrial-power load cartridges when packaged in accordance with DOT packaging regulations.
8. Transportation in accordance with DOT 49 CFR Parts 100-178.
9. Items preempted by federal regulations.

**3301.1.1 Explosive material standard.** In addition to the requirements of this chapter, NFPA 495 shall govern the manufacture, transportation, storage, sale, handling and use of explosive materials. See also Chapter 70.74 RCW and Chapter 296-52 WAC.

**MOTOR VEHICLE.** For the purposes of this chapter, the term motor vehicle includes, but is not limited to, a vehicle, machine, tractor, trailer, or semi-trailer, or any combination thereof, propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property. The term "motor vehicle" also includes freight containers or cargo tanks used, or intended for use, in connection with motor vehicles. For reference, see 49 CFR Pt. 171.8 (October 1994).





**3404.2.7.11 Tank Lining.** Steel tanks are allowed to be lined only for the purpose of protecting the interior from corrosion or providing compatibility with a material to be stored. Only those liquids tested for compatibility with the lining material are allowed to be stored in lined tanks. Lining of leaking underground storage tanks shall be done in accordance with the provisions of WAC 173-360-325.

**3404.2.7.10.1 Leaking tank disposition.** Leaking tanks shall be handled in accordance with WAC 173-360-325.

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**3404.2.8.7 Arrangement.** Tanks shall be listed for above-ground use, and each tank shall be in its own vault.

**Exception:** Below-grade vaults may contain a maximum of three tanks.

Compartmentalized tanks shall be allowed and shall be considered as a single tank. Adjacent vaults shall be allowed to share a common wall. The common wall shall be liquid and vapor tight and shall be designed to withstand the load imposed when the vault on either side of the wall is filled with water.



**3404.2.11 Underground tanks.** Underground storage of flammable and combustible liquids in tanks shall comply with Section 3404.2 and Sections 3404.2.11.1 through 3404.2.11.5.2. Corrosion protection shall comply with WAC 173-360-305.



**3405.4.1 Unit with a capacity of 60 gallons or less.**

Solvent distillation units used to recycle Class I, II or IIIA liquids having a distillation chamber capacity of 60 gallons or less shall be listed, labeled and installed in accordance with Section 3405.4 and UL 2208.

**Exceptions:**

1. Solvent distillation units installed in dry cleaning plants in accordance with Chapter 12.
2. Solvent distillation units used in continuous through-put industrial processes where the source of heat is remotely supplied using steam, hot water, oil or other heat transfer fluids, the temperature of which is below the auto-ignition point of the solvent.
- ⇒ 3. Approved research, testing and experimental processes.

**3406.5.4.5 Commercial, industrial, governmental or manufacturing.** Dispensing of Class II and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with the following:

(those sections not noted here remain unchanged)

**3406.5.4 Dispensing from tank vehicles and tank cars.**

Class I, II or III liquids shall be transferred from a tank vehicle or tank car only into an approved atmospheric tank or approved portable tank, except as provided in Sections 3406.5.4.1 through 3406.5.4.5.

**3406.5.4.1 Marine craft and special equipment.** Liquids intended for use as motor fuels are allowed to be transferred from tank vehicles into the fuel tanks of marine craft and special equipment when approved by the fire code official, and when:

1. The tank vehicle's specific function is that of supplying fuel to fuel tanks.
2. The operation is not performed where the public has access or where there is unusual exposure to life and property.
3. The dispensing line does not exceed 50 feet in length.
4. The dispensing nozzle is approved.
5. Each premises is issued a separate permit in accordance with Section 105.6.17.

6. Mobile fueling shall not take place within 15 feet of streets, alleys, public ways, buildings, property lines, combustible storage or storm drains.

**Exceptions:**

1. The distance to storm drains can be eliminated if an approved storm drain cover or an approved equivalent that will prevent any fuel from reaching the drain is in place prior to fueling or hose being placed within 15 feet of the drain. When placement of a storm drain cover will cause the accumulation of excessive water or difficulty in safely conducting the fueling, it shall not be used and the fueling shall not take place within 15 feet of a drain.
  2. The distance to storm drains can be eliminated for drains that direct intake to approved oil-water separators.
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12. Fuel delivery vehicles shall be equipped with clean up supplies in accordance with the Department of Ecology's Stormwater Management Manual for Western Washington, Volume IV – Source Control BMP (Publication No. 99-14). Such supplies shall be readily available for employment by the operator at all times.
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25. Operators shall place a drip pan or absorbent, in good condition, under each fuel fill opening prior to and during all dispensing operations. Drip pans shall be liquid tight. The pan or absorbent shall have a capacity of at least 3 gallons. Spills retained in the drip pan or absorbent pillow need not be reported. Operators, when fueling, shall have on their persons an absorbent pad capable of capturing diesel foam overfills. Except during fueling, the nozzle shall face upwards and an absorbent pad shall be kept under the nozzle to prevent drips. Contaminated absorbent pads shall be disposed of regularly in accordance with local, state and federal requirements.
  26. All persons and parties with an interest in the property (i.e., property owner, lessor, real-estate company, property manager as well as operators of the property) must give consent in writing to allow the mobile fueling to occur on the property. Managers, lessees, renters and other persons cannot solely give permission. Each person or party must indicate that they understand the risk of spills.
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17. Fuel dispensing is prohibited within 25 feet of any source of ignition.